4		CFNT	BAL WILLITIES	Mochitrol - U.S. Not action - 25)		
	Appro			ARDP82604578	003990459009-5	
446F1844	T ii	CUNFIDEN	TIAI	REPORT	CD NO.	
JOUNTR		Russian Zone)	ti Albania		DATE DISTR 10 JAM	50 Y
SUBJECT	The Troms	dorf Rocket	,		NO. OF PAGES 2	
LACE		25X1				25X1
CQUIRE	:D				NO. OF ENCLS.	
ATE OF	INFO		* * * * * * * * * * * * * * * * * * *		SUPPLEMENT TO	
			(1. gr) 1. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	25X1	REPORT NO.	
		· · · · · · · · · · · · · · · · · · ·	KARANTERANISTERA			
U. S. C., AT A	ent contains infollation of the contains within the contains within the condition of the contains and the co	on appecting the Hational D Scaling of the Espionage Transmission on the Espi All Habitson the Transmission	1/2	THIS IS UNEV	ALUATED INFORMATION	
	mar marino sociator of	TRIS POUL IS PROMISITED.	538			
1.	Beete dovo	Janmont of the	- Marana		• • • • • • • • • • • • • • • • • • • •	
25X1	Dr. Tromsd	orr then orric	cer with WAPRI	IEF 1 had been r	aken by Krupp in Esse ut in charge of this	en.
25X1 25X1	capture at	the testing r	range of Hille	ersleben, offere	Russians, after his d him a monthly salar	v of
25/(1	the Berlin	nuses and spec	cial rations, ich was at the	Tromsdorf immed	iately accepted and j on the premises of G	lad wad
2.	At the Beri	lin Institute.	, the Russians	made a whole d	epartment available to omsdorf rocket. The	50
	a. A	desigining sec	tion with ten	technicians, h	eaded by Ing. Richter	` o
	b. Ar	mathematical s	section with e	ight mathematic	ians。	
	c. An	experimental	workshop with	five mechanics	•	
3.	Especially important was the solution of those problems connected with the technique of flow. The necessary calculations and experiments were carried out by aircraft specialists. Diesel motor specialists occupied themselves with the proper combustion of the Diesel fuel carried by the rocket.					
40	The work, however, did not progressfast enough for the Russians. In order to create a favorable impression in Russia, trick photos were made showing the practical firing tests of the Tromsdorf rocket although in reality, no such tests were ever conducted.					
	tests were	ever conducted	d.		igh in reality, no s	
5。	In October	1946, Dr. Tro	d. medorf and hi	s family. toget:	agh in reality, no super with other special to work in a suburb of	uch lists
5。 6。 	In October from GEMA, Moscov.	1946, Dr. Tro	d. medorf and hi to Russia.	s family, toget: He is now said i	ner with other specia	uch lists
	In October from GEMA, Moscow.	ever conducted 1946, Dr. Trop were deported	d. msdorf and hi to Russia.	s family, toget: He is now said i	ner with other specia	uch lists
	In October from GEMA, Moscow. A short des	1946, Dr. Tromated were deported scription of the remarks of the r	d, msdorf and hi to Russia. he Tromsdorf: ocket. is fired like	s family, togetomer for the is now said to rocket	ner with other specia	lists
6。 	In October from GEMA, Moscow. A short des a. Perform The Tro	ever conducted 1946, Dr. Trom were deported scription of the mance of the re- maderf rocket mun K3 and reac	d, msdorf and hi to Russia. he Tromsdorf : ocket. is fired like ches a maximum	s family, togetomer for the is now said to rocket	ner with other special to work in a suburb of tile from the German roximately 80 km. With	lists
6。 State	In October from GEMA, Moscow. A short des a. Perform The Tro	ever conducted 1946, Dr. Trom were deported scription of the mance of the re- manderf rocket our K3 and reac	d, msdorf and hi to Russia. he Tromsdorf : ocket. is fired like ches a maximum	s family, togetome is now said in the is now said in the rocket e a 24 cm project in height of approach to the said in the sa	ner with other special to work in a suburb of tile from the German roximately 80 km. With	lists
6。 State	In October from GEMA, Moscov. A short des a. Perform The Tro range g	ever conducted 1946, Dr. Trom were deported scription of the mance of the rom madorf rocket run K3 and reach CLASSIFICATION NSRB	msdorf and hi to Russia. he Tromsdorf: ocket. is fired like ches a maximur SECPET/CONTE	s family, together is now said in rocket e a 24 cm project height of appropriate the said in the said	ner with other special to work in a suburb of tile from the German roximately 80 km. With	lists
6.	In October from GEMA, Moscovo. A short des a. Perform The Tro range g	ever conducted 1946, Dr. Trop were deported scription of the mance of the re- manded of rocket an K3 and read CLASSIFICATION NSRB	msdorf and hi to Russia. he Tromsdorf : ocket. is fired like ches a maximur SECPET/CONTE	s family, togetome is now said in the is now said in the rocket e a 24 cm project height of appropriate the rocket in the rocke	ner with other special to work in a suburb of tille from the German eximately 80 km. With TALS CNLY	lists
6. STATE ARMY	In October from GEMA, Moscov. A short des a. Perform The Tro range g	1946, Dr. Tromated the respective of the respect	msdorf and hi to Russia. he Tromsdorf ocket. is fired like ches a maximum SECRET/CONTE	s family, together is now said in rocket e a 24 cm project height of appropriate the said in the said	ner with other special to work in a suburb of tille from the German eximately 80 km. With TALS CNLY	lists
STATE ARMY	In October from GEMA, Moscov. A short des a. Perform The Tro range g	ever conducted 1946, Dr. Troi were deported scription of the mance of the re mander of th	msdorf and hi to Russia. he Tromsdorf ocket. is fired like ches a maximum SECRET/CONTE	s family, toget: He is now said is rocket e a 24 cm project n height of appropriate the said is ROL - U.S. OFFICE TION Documents No Electrical	er with other special to work in a suburb of tille from the German eximately 80 km. With TALS CNLY	lists

CIA-RDP82-00457R003900450009-5 Approved For

SECHET/CUNTROL - U.S. OFFICIALS ONLY

25X1

CENTRAL INTELLIGENCE AGENCY

~ 2 m

aid of rocket propulsion which then takes over, the range can be increased to over 500 km. If the rocket is produced accurately in all its parts and if the amount of propellant is calculated exactly, the target accuracy is said to be surprisingly high.

25X1 b. Description of the parts.

The rocket consists of an inner and an outer body. The inner body is marked (1). The diffusor (2) is served to the front end of the outer body. In order to protect its extremely sharp front edge, the diffusor issurewed in shortly before the firing of the rocket. The copper leading rings (3) are rolled into the cuter hull; they guide the rocket in the rifling of the gun barrel. The spacing blocks (4) fix accurately the distance between the outer and the inner bodies. The inner body is composed of three main parts. The slender point is screwed in, and the cylindrical surface (5) helps to center the point perfectly. After the point has been screwed in, the polished outer surface (must fit absolutely smoothly into the adjoining inner body. The rear part of the inner body is soldered to the front one. The outer surface of the inner body is finely polished. The hollow space of the head carries the explosive charge (6) into which the fuse (7) protrudes. The inner body is subdivided into chambers. The chamber marked (8) contains the Diesel fuel. Fine holes are drilled in great number around the periphery at (9); they are sealed by a pasted-on collodion strip. The part numbered (10) is a pressure regulator. The chamber marked (11) contains slow burning black powder. This chamber is closed off by valves (12) and (13). All surfaces serving as ducts for air are highly polished. Since the rocket must not be off balance in the slightest degree, the center of gravity must lie exactly in the axis.

c, Operation of the rocket.

After firing from the K3 gun, the rocket flies at first like an ordinary shell with an initial velocity of 800 m/sec. It revolves about 100 times/ sec through the rifling of the barrel and is thereby kept stable in flight. The air rushing into the diffusor (2) is highly compressed and heats up quickly. At a certain time, which can be calculated, the heat at point (9) becomes so great that the collodion strip burns up. As a result the fine exit apertures for the Diesel fuel are opened. Carried away by the strong air current, the fuel is vaporized. The air/fuel mixture ignites and the combustion gases leave through the Laval jet (14) propelling the rocket at high velocity. Through the valve at (12) which has opened in the meantime, the powder chamber has established contact between the hot combustion gases and the powder which now ignites, whereupon valve (12) closes again. Now the pressure of the powder gases forces the Diesel fuel out and the pressure regulator (10) provides the pressure for an even flow. If the pressure in the chamber (11) becomes too high, the valve (13) opens and permits the surplus powder gases to escape through the aval jet.

25X1	Comment: Tromsdorf is a ballistics expert of no small talent.
25X1	He developed the German 90 mm gun which was first used by German parachutists in their assault on Crete. He was a specialist on recoilless gun barrels and his ideas considerably simplified the design and construction
	of gun carriages. He worked in close connection with Prof. Klose at the German Army testing range of Kummersdorf. Tromsdorf was also engaged in jet propulsion problems. After the war, the Russians wanted him to continue in his research and gave him a small, specially equipped factory. In
	1948, Prof. Klose and Tromsdorf near Moscov complaining of their extreme isolation because of the lack of proper contacts and facilities. Both have to instruct their children privately because no schools are available.

CONFIDENTIAL

SECRAT/CONTROL - U.S.OFFICIALS CHLY